IEPA Log No.: **C-0783-09** CoE appl. #: **2009-1218** 

Public Notice Beginning Date: **April 29, 2013**Public Notice Ending Date: **May 29, 2013** 

Section 401 of the Federal Water Pollution Control Act Amendments of 1972

#### Section 401 Water Quality Certification to Discharge into Waters of the State

#### Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: Illinois Department of Transportation – District 7, 400 West Wabash Avenue, Effingham, IL 62401

**Discharge Location:** Section 36, T4N, R12W of the 2<sup>nd</sup> P.M. in Lawrence County near Lawrenceville

Name of Receiving Water: Embarras River and Unnamed Wetlands

**Project Description:** Replacement of the bridge carrying Illinois Route 1 over the Embarras River.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please call Thaddeus Faught at 217/782-3362.

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Fact Sheet for Antidegradation Assessment Illinois Department of Transportation – Embarras River and wetlands – Lawrence County IEPA Log No. C-0783-09

COE Log No. 2009-1218

Contact: Brian Koch at 217-558-2012

April 29, 2013

The Applicant has applied for 401 water quality certification for the replacement of the Illinois Route 1 Bridge over the Embarras River in Lawrenceville, located in Section 36, Township 4 North, Range 12 West, in Lawrence County, Illinois. The project would consist of replacing the existing deteriorating bridge with a new 3-span composite 60" web plate girder structure, 481.5" back to back of abutments with a 40" clear width. Two existing in-stream piers that are below the Ordinary High Water Mark (OHWM) would be removed and the voids would be filled with clean fill material (stone riprap class A-5). Due to the northerly relocation of the bridge structure, the pier that currently exists in the center of the Embarras River channel would be removed and would not be replaced, thereby restoring natural flow to the channel. The replacement pier would be installed below the OHWM but to the south of the main channel. Installation of this structure would require a cofferdam. An additional pier would be installed on the northern bank of the Embarras River, but above the OHWM. Construction of the new bridge would necessitate the permanent fill of 1.557 acres of forested wetlands due to embankment placement and construction of the road bed. Mitigation for the proposed impacts would be provided through the establishment of 7.564 acres of forested wetlands at the newly approved Lawrenceville Wetland Mitigation Bank, located southeast of the project location near the Embarras River.

#### Identification and Characterization of the Affected Water Body.

The Embarras River (Segment BE-01) has a 7Q10 flow of 33.3 cfs and is a General Use Water. It is listed in the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for primary contact recreation use with a potential cause given as fecal coliform. The river at this location is not an enhanced waterbody pursuant to the dissolved oxygen water quality standard. Using the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*, the Embarras River at this location is not listed as a biologically significant stream but has been given a "C" integrity rating.

The three unnamed wetlands (herein referred to as "Wetland 1A", "Wetland 1C" and "Wetland 3") to be permanently impacted by the proposed project are General Use waters with zero 7Q10 flow. Wetlands 1A and 1C are forested wetlands that are dominated by silver maple, asters, and white grass. The wetlands are bordering on being High Quality Aquatic Resources due to their Floristic Quality Index (FQI) value of 19.6 and Native mean C value of 2.9. Given their higher quality, the Applicant has proposed to provide mitigation for these wetlands at a 5:1 ratio. Wetland 3 is a forested wetland dominated by green ash, black walnut, American elm, silver maple, panicled aster, and poison ivy. The wetland has a FQI value of 11.7 and a Native mean C value of 2.9. The Applicant is proposing to provide mitigation for this wetland at a 1.5:1 ratio. The unnamed wetlands have not been assessed under the Agency's 305(b)/303(d) program and have not been given an integrity rating or been listed as biologically significant in the 2008

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Illinois Department of Natural Resources publication Integrating Multiple Taxa in a Biological Stream Rating System. The unnamed wetlands are not enhanced in regards to the dissolved oxygen water quality standard.

### Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The pollutant load increases that would occur from this project include some possible increases in suspended solids during construction. Aquatic life uses in the area to be disturbed by cofferdam construction would be temporarily impacted, but the habitat and biota would be naturally restored over time. Pier construction would not result in additional permanent fill impacts, as piers would be constructed in locations of existing piers and the existing center pier would be removed and not replaced. However, the project would permanently fill 1.557 acres of forested wetlands, thereby removing the aquatic life uses of these areas.

#### **Fate and Effect of Parameters Proposed for Increased Loading.**

The increase in suspended solids would be local and temporary. Erosion and sediment control measures would be utilized to minimize any increase in suspended solids and prevent impacts to downstream waters. Suspended solids would be transported downstream and settle over time but would have negligible impacts on aquatic life use. A total of 7.564 acres of wetland mitigation in the Embarras River watershed would be conducted to offset the loss of aquatic life uses in the wetlands to be impacted.

#### Purpose and Social & Economic Benefits of the Proposed Activity.

The project would provide the public a safe and more efficient highway and bridge crossing.

## Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The construction of the proposed project would follow guidelines set forth by the Agency and USACE. Erosion and sediment control for the project would follow that specified by the Illinois Department of Transportation's Standard Specification for Road and Bridge Construction. All erosion and sediment control measures would be maintained until construction is completed and site conditions stabilize. In stream work would be performed during periods of low-flow. The Applicant's proposed construction plan has taken into the consideration public safety and efficiency of travel along Route 1 while minimizing environmental impacts to the greatest extent possible. Constructing the new bridge along the existing corridor would result in the least amount of environmental impacts, as the existing bridge and highway is flanked by wetlands both to the east and west. Rerouting the bridge would result in a greater amount of impacts to previously undisturbed wetland areas, and would also be ineffective form a cost and efficiency of travel perspective. The least intrusive alternative would be to not construct a new bridge. This is not a practicable alternative given the rapid deterioration of the existing bridge.

# Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.

The IDNR EcoCAT system was consulted on October 14, 1011. It was immediately determined that no State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves are in the vicinity of the project location. Consultation was immediately terminated.

### **Agency Conclusion.**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all existing uses of the Embarras River and unnamed wetlands would be maintained or mitigated for; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity would benefit the community at large by providing a safe, more efficient highway for the public. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.